CHECKLIST TO DESIGNATE AREAS OF EVALUATION FOR REQUESTS FOR PROPOSAL (RFP)

	REQUISITION NUMBER	DUE DATE	TIME DUE
	2586	11/05/18	noon est
MDOT PROJECT MANAGER Carrie Warren	JOB NUMBER (JN) 203586	CONTROL SECTION (CS) 82023, 82024, 82251	

DESCRIPTION

Bridge Design Services to provide supplemental design support of the I-94 modernization for 7 bridges.

MDOT PROJECT MANAGER: Check all items to be included in RFP.

WHITE = REQUIRED
** = OPTIONAL

Check the appropriate Tier in the box below

CONSULTANT: Provide only checked items below in proposal When applicable, Best Value scoring criteria is listed separately in the RFP.

☐ TIER 1 ($50,000 - $150,000)	☐ TIER II ($150,000-$1,000,000)	☒ TIER III (>$1,000,000)	
☐	☐	☒	Understanding of Service **
N/A	☐	☐	Innovations
☐	☐	☒	Organizational Chart
☐	☐	☒	Qualifications of Team
N/A	N/A	☒	Quality Assurance/Quality Control **
☐	☐	☒	**Location:** The percentage of work performed in Michigan will be used for all selections unless the project is for on-site inspection or survey activities, then location should be scored using the distance from the consultant office to the on-site inspection or survey activity.
N/A	N/A	☐	Presentation **
N/A	N/A	☐	Technical Proposal (if Presentation is required)
3 pages (MDOT Forms not counted) Resumes will only be accepted for Best Value Selections.	7 pages (MDOT Forms not counted)	14 pages (MDOT forms not counted)	Total maximum pages for RFP **not including key personnel resumes.** Resumes limited to 2 pages per key staff personnel.

PROPOSAL AND BID SHEET E-MAIL ADDRESS – mdot-rfp-response@michigan.gov

The Consultants will receive an e-mail reply/notification from MDOT when the proposal is received. Please retain a copy of this e-mail as proof that the proposal was received on time. Consultants are responsible for ensuring that MDOT receives the proposal on time.

* Contact Contract Services Division immediately at 517-373-4680 if you do not get an auto response.

GENERAL INFORMATION

Any questions relative to the scope of services must be submitted by e-mail to the MDOT Project Manager. Questions must be received by the Project Manager at least five (5) working days prior to the due date and time specified above. All questions and answers will be placed on the MDOT website as soon as possible after receipt of the questions, and at least three (3) days prior to the RFP due date deadline. The names of vendors submitting questions will not be disclosed.

MDOT is an equal opportunity employer and MDOT DBE firms are encouraged to apply. The participating DBE firm, as currently certified by MDOT's Office of Equal Opportunity, shall be listed in the Proposal.

MDOT FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION

5100D – Request for Proposal Cover Sheet
5100J – Consultant Data and Signature Sheet (Required for all firms performing non-prequalified services on this project.)

(These forms are not included in the proposal maximum page count.)

The Michigan Department of Transportation (MDOT) is seeking professional services for the project contained in the attached scope of services.

If your firm is interested in providing services, please indicate your interest by submitting a Proposal, Proposal/Bid Sheet or Bid Sheet as indicated below. The documents must be submitted in accordance with the latest (Consultant/Vendor Selection Guidelines for Services Contracts."

RFP SPECIFIC INFORMATION

☒ ENGINEERING SERVICES ☐ BUREAU OF TRANSPORTATION PLANNING ☐ OTHER

THE SERVICE WAS POSTED ON THE ANTICIPATED QUARTERLY REQUESTS FOR PROPOSALS

☒ NO ☐ YES DATED _____ THROUGH _____

☒ **Prequalified Services** – See the attached Scope of Services for required Prequalification Classifications.	☐ **Non-Prequalified Services** – If selected, the vendor must make sure that current financial information, including labor rates, overhead computations, and financial statements, is on file with MDOT's Office of Commission Audits This information must be on file for the prime vendor and all sub vendors so that the contract will not be delayed. **Form 5100J is required with proposal for all firms performing non-prequalified services on this project.**

☒ **Qualification Based Selection** - Use Consultant/Vendor Selection Guidelines.

For all Qualifications Based Selections, the selection team will review the information submitted and will select the firm considered most qualified to perform the services based on the proposals. The selected firm will be asked to prepare a priced proposal. Negotiations will be conducted with the firm selected.

For a cost plus fixed fee contract, the selected vendor must have a cost accounting system to support a cost plus fixed fee contract. This type of system has a job-order cost accounting system for the recording and accumulation of costs incurred under its contracts. Each project is assigned a job number so that costs may be segregated and accumulated in the vendor's job-order accounting system.

☐ **Qualification Based Selection / Low Bid** – Use Consultant/Vendor Selection Guidelines. See Bid Sheet instructions for additional information.

For Qualification Review/Low Bid selections, the selection team will review the proposals submitted. The vendor that has met established qualification threshold and with the lowest bid will be selected.

☐ **Best Value** – Use Consultant/Vendor Selection Guidelines, See Bid Sheet Instructions below for additional information. The bid amount is a component of the total proposal score, not the determining factor of the selection.

☐ **Low Bid** (no qualifications review required – no proposal required.)

BID SHEET INSTRUCTIONS

Bid Sheet(s) are located at the end of the Scope of Services. Submit bid sheet(s) with the proposal, to the email address: mdot-rfp-response@michigan.gov. Failure to comply with this procedure may result in your bid being rejected from consideration.

PARTNERSHIP CHARTER AGREEMENT

MDOT and ACEC created a Partnership Charter Agreement which establishes guidelines to assist MDOT and Consultants in successful partnering. Both the Consultant and MDOT Project Manager are reminded to review the ACEC-MDOTPartnership ,Charter Agreement and are asked to follow all communications, issues resolution and other procedures and guidance's contained therein.

PROPOSAL REQUIREMENTS

Proposals must be submitted for this project electronically. Proposal submittal requirements are listed in *PART IV – INSTRUCTION FOR SUBMITTING PROPOSALS* at the following link Selection Guidelines for Service Contracts

FINANCIAL REQUIREMENTS FOR NON-PREQUALIFIED VENDORS
Financial Requirements for Non-Prequalified Consultants/Vendors

E-VERIFY REQUIREMENTS
E-Verify is an Internet based system that allows an employer, using information reported on an employee's Form I-9, Employment Eligibility Verification, to determine the eligibility of that employee to work in the United States. There is no charge to employers to use E-Verify. The E-Verify system is operated by the Department of Homeland Security (DHS) in partnership with the Social Security Administration. E-Verify is available in Spanish.

The State of Michigan is requiring, under Public Act 200 of 2012, Section 381, that as a condition of each contract or subcontract for construction, maintenance, or engineering services that the pre-qualified contractor or subcontractor agree to use the E-Verify system to verify that all persons hired during the contract term by the contractor or subcontractor are legally present and authorized to work in the United States.

Information on registration for and use of the E-Verify program can be obtained via the Internet at the DHS Web site: http://www.dhs.gov/E-Verify.

The documentation supporting the usage of the E-Verify system must be maintained by each consultant and be made available to MDOT upon request.

It is the responsibility of the prime consultant to include the E-Verify requirement documented in this NOTIFICATION in all tiers of subcontracts.

DIGITAL SIGNATURE OF CONTRACTS
On **January 4, 2018**, Contract Services Division implemented the use of CoSign as the exclusive software for digitally signing all consultant contracts and consultant contract related documents. All other digital signing methods are no longer accepted.

Prior to using CoSign, all external partners must apply for a free digital signature user account by submitting a MDOT Digital Signature Certificate Request Form.

MDOT INSURANCE UPDATED 3.9.17

At a minimum, the insurance types and limits identified below, may be required from the selected consultant, prior to contract award.

Required Limits	Additional Requirements
Commercial General Liability Insurance	
Minimal Limits: $1,000,000 Each Occurrence Limit $1,000,000 Personal & Advertising Injury Limit $2,000,000 General Aggregate Limit $2,000,000 Products/Completed Operations	Consultants must have their policy endorsed to add "the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents" as additional insureds
Automobile Liability Insurance	
Minimal Limits: $1,000,000 Per Occurrence	
Workers' Compensation Insurance	
Minimal Limits: Coverage according to applicable laws governing work activities.	Waiver of subrogation, except where waiver is prohibited by law.
Employers Liability Insurance	
Minimal Limits: $500,000 Each Accident $500,000 Each Employee by Disease $500,000 Aggregate Disease	
Professional Liability (Errors and Omissions) Insurance	
Minimal Limits: $1,000,000 Per Claim	

The Insurer shall provide at least thirty (30) days written notice of cancellation. The Prime Consultant will be responsible to verify subconsultant(s) compliance with MDOT's insurance requirements.

Michigan Department of Transportation

SCOPE OF SERVICE
FOR
DESIGN SERVICES
Supplemental Design Support

CONTROL SECTION(S): 82023, 82024, and 82251

JOB NUMBER(S): 203586 PE

PROJECT LOCATION:
Seven (7) bridges located within the limits of the I-94 Modernization Project, between I-96 and Conner Avenue in the City of Detroit.

Grand River Avenue over I-94 (S17 of 82023, JN **200221)***
East Grand Blvd over I-94 (S09 of 82024-3, S09 of 82024-4, JN 200213) **
Frontenac Street over I-94 (S12 of 82024, JN 200218)*
Burns Street over I-94 (S14 of 82024, JN 200219)*
Milwaukee Avenue over I-75 (S02 of 82251, JN 200222) **
Conrail over I-94 (X01 of 82024, JN 200216)***
Conrail over I-94 (X02 of 82024, JN 200217)***

*MDOT Bridge Design Consultant led out of the I-94 Project Office, PM is Talia Belill
**MDOT In-House Bridge Design, led by Kyle Kopper, P.E.
*** MDOT Bridge Design Consultant led out of the I-94 Project Office, PM is Aaron Mattson

PROJECT DESCRIPTION:
This Request for Proposal (RFP) includes seven (7) bridges located within the limits of the I-94 Modernization Project, between I-96 and Conner Avenue in the City of Detroit.

MDOT will be selecting one Consultant team to complete the design support work based on the responses to this single RFP.

This scope is for supplemental design support services, based on project design needs that are likely to exceed the capacity of the Small Business Design Support Consultants. Design support services to be provided are anticipated to include:

- Road and Streets (Road approach and site demolition plans)
- Street/Freeway Lighting
- Permanent Freeway Traffic Signing Plans
- Permanent Non-Freeway Traffic Signing Plans
- Pavement Marking Plans
- Municipal Utility Design
- ITS Design
- Landscaping
- Roadway Geotechnical Investigations
- Traffic Signal Design
- Maintaining Traffic Design

The work includes removal and replacement of the existing bridge(s), site demolition, roadway approaches, utility relocation, traffic & safety improvements, electrical work, maintenance of traffic during construction and landscaping as detailed below.

Grand River Avenue over I-94 (S17 of 82023, JN 200221)

Anticipated Construction Letting: March 2021

The anticipated scope of work for the Supplemental and Small Business consultants to support the removal and replacement of the existing bridge carrying Grand River over I-94 (designed by others) to include site demolition, roadway approaches, drainage design, traffic signal design, related roadway geotechnical work (soil borings), freeway & non-freeway signing, utility relocation, traffic & safety improvements, electrical work (street/freeway lighting and ITS), maintenance of traffic during construction, and landscaping.

East Grand Blvd over I-94 (S09 of 82024-3, S09 of 82024-4, JN 200213)

Anticipated Construction Letting: October 2019

The anticipated scope of work for the Supplemental and Small Business consultants to support the removal and replacement of the existing bridges carrying East Grand Boulevard over I-94 (designed by others) to include traffic signal design, related roadway geotechnical work (soil borings), ITS design, and maintenance of traffic during construction as it relates to the freeway.

Frontenac Street over I-94 (S12 of 82024, JN 200218)

Anticipated Construction Letting: March 2021

The anticipated scope of work for the Supplemental and Small Business consultants includes support for the removal and replacement of the existing bridge carrying Frontenac Street over I-94 (designed by others) to include site demolition, roadway approaches, drainage design, traffic signal design, related roadway geotechnical work (soil borings), freeway & non-freeway signing, utility relocation, traffic & safety improvements, electrical work (street/freeway lighting and ITS), maintenance of traffic during construction, and landscaping.

Burns Street over I-94 (S14 of 82024, JN 200219)

Anticipated Construction Letting: March 2021

The anticipated scope of work for the Supplemental and Small Business consultants includes the removal and replacement of the existing bridge carrying Burns Street over I-94 (designed by others), to include site demolition, roadway approaches, drainage design, traffic signal design, related roadway geotechnical work (soil borings), freeway & non-freeway signing, utility relocation, traffic & safety improvements, electrical work (street/freeway lighting and ITS), maintenance of traffic during construction, and landscaping.

Milwaukee Avenue over I-75 (S02 of 82251, JN 200222)

Anticipated Construction Letting: October 2019

The anticipated scope of work for the Supplemental and Small Business consultants to support the removal and replacement of the existing bridge carrying Milwaukee Avenue over I-94 (designed by others) to include traffic signal design, related geotechnical work (soil borings), ITS Design, and maintenance of traffic during construction as it relates to the freeway.

Conrail over I-94 (X01 of 82024, JN 200216)

Anticipated Construction Letting: February 2021

The anticipated scope of work for the Supplemental consultant includes the removal and replacement of the existing bridge carrying Conrail X01 over I-94 (designed by others), to include site demolition, roadway approaches, traffic signal design, related roadway geotechnical work (soil borings), freeway & non-freeway signing, utility relocation, traffic & safety improvements, electrical work (street/freeway lighting and ITS), maintenance of traffic during construction, and landscaping.

Conrail over I-94 (X02 of 82024, JN 200217)

Anticipated Construction Letting: February 2021

The anticipated scope of work for the Supplemental consultant includes the removal and replacement of the existing bridge carrying Conrail X01 over I-94 (designed by others), to include site demolition, roadway approaches, traffic signal design, related roadway geotechnical work (soil borings), freeway & non-freeway signing, utility relocation, traffic & safety improvements, electrical work (street/freeway lighting and ITS), maintenance of traffic during construction, and landscaping.All of the proposed bridges and roadway approaches shall be designed to accommodate the improvements being proposed as part of the I-94 Modernization Project.

The scope of work will be verified at a Scope Verification Meeting with MDOT personnel, the MDOT Owner's Representative Consultant (HNTB Michigan, Inc.), Small Business Design Support Consultants, the selected Design Support Consultants from this selection and MDOT's Bridge Design Consultants and Project Managers. The meeting will be scheduled prior to the Consultant's submittal of the Priced Proposal to the MDOT Project Manager.

Certain scope of work items will be completed as part of this project under separate MDOT contracts with the MDOT's Owner's Representative Consultant (ORC), MDOT Bridge Design Consultants, and the MDOT Design Support Consultants defined further in this Request for Proposal.

The selected Consultant team will be required to participate in a design partnership workshop and be a signatory party to the I-94 Project Partnering Charter to document their commitment to being a part of a collocated, collaborative team focused on achieving MDOT's project goals for this project.

STAFFING REQUIREMENTS:
Design Support Consultants delivering services under this Design Support contract will be required to work collaboratively with the Michigan Department of Transportation, and other MDOT consultants performing design services on this project. **Design Support Consultants selected under this RFP will be required to provide a minimum of one key design personnel present in the I-94 Project Office 60% of the time while working on the project through plan completion.** The I-94 Project office is located at 3031 West Grand Blvd, Suite 236, Detroit MI 48202. Appropriate safety protocols will be in place and secure parking will be made available to all personnel working at the I-94 Project Office.

MDOT and MDOT's ORC will lead the collaboration between the selected Design Support Consultants and the Bridge Design Consultants and will have project representatives in the Project Office. The I-94 Project Office will provide Design Support Consultant key design staff and Bridge Design staff with a workstation, computer, software, printing capability, office supplies and other resources necessary to deliver their services while working at the I-94 Project Office. One work station will be made available for each Consultant contract while working at the I-94 Project Office. For Consultants who propose more than one key staff working at the I-94 Project Office the Consultant may need to provide additional equipment and software.

Integration and cohousing of project team members will enhance collaboration between all parties and support the goal of creating a strong mentoring environment to support technical and business growth by Small Business firms into new MDOT prequalification categories. Small Businesses providing design services for the I-94 projects will be engaged in a personalized Technical Training curriculum to strengthen their technical capabilities and understanding of MDOT project delivery where applicable as determined by MDOT. It is envisioned that the MDOT prequalified Design Support Consultants will be engaged in the training effort and serve in mentoring roles. Hours will be allocated at the Scope Verification meeting to the Design Support Consultants to support their work in this capacity.

ANTICIPATED SERVICE START DATE: January 2019

ANTICIPATED SERVICE COMPLETION DATE: December 2022

DBE PARTICIPATION REQUIREMENT: 10%

PRIMARY PREQUALIFICATION CLASSIFICATION(S):
Design – Roadway: Intermediate

SECONDARY PREQUALIFICATION CLASSIFICATION(S):

Design – Utilities: Roadway Lighting
Design – Traffic: Signal
Design – Traffic: Signing – Freeway
Design – Traffic: Signing – Non-Freeway
Design – Traffic: Pavement Marking
Design – Traffic: Work Zone Maintenance of Traffic
Design – Traffic: Work Zone Mobility & Safety
Design – Utilities: Municipal
Design – Traffic: ITS Design & System Manager
Landscape Architecture
Design Geotechnical: Advanced

PREFERRED QUALIFICATIONS AND CRITERIA (FOR NON-CLASSIFIED SERVICES):

1) RAILROAD AND UTILITY COORDINATION
   MDOT and MDOT's ORC shall be responsible for project Railroad Coordination.
   The Supplemental Design Support Consultant and MDOT/ORC shall share responsibilities for project Utility Coordination. See "Consultant Responsibilities" item Y for more information.

MDOT PROJECT MANAGER:

The project management team for the I-94 Modernization is led by Terry Stepanski, Senior Project Manager. He is supported in that role by Adam Penzenstadler, P.E., Deputy Project Manager, and Carrie Warren, P.E., Deputy Project Manager. Carrie will serve as the Project Manager for this contract.

All correspondence related to this Request for Proposal should be directed to Carrie Warren using the contact information included below:

Carrie Warren, P.E. Senior Contracts and Projects Engineer
MDOT Detroit TSC
1060 W. Fort St.
Detroit, MI 48226 Phone: (313) 967-5218
E-Mail: warrenc1@michigan.gov

CONFLICT OF INTEREST:

MDOT's ORC performing the role of lead consultant in the areas of road design, bridge design or maintaining traffic will not be allowed to participate or join any design team on this project. HNTB Michigan, Inc. and Alfred Benesch and Company are the lead consultants in these areas and will not join any design teams. Other MDOT ORC team members in non-lead roles may participate. A sub-consultant to the ORC may be allowed to participate as a consultant but will also be subject to a review for potential conflict of interest, determined on a case by case basis. Also note item 5 under "ADDITIONAL PROPOSAL INFORMATION TO BE SCORED" as listed in Requisition 2585 for the Small Business Design Support Request for Proposal.

CONSTRUCTION COST:

A. The estimated cost of construction is:

Location	Total Cost
Grand River Avenue over I-94 (S17 of 82023	$13,100,000
East Grand Blvd over I-94 (S09 of 82024) JN	$23,190,000
Frontenac Street over I-94 (S12 of 82024) JN	$8,440,000
Burns Street over I-94 (S14 of 82024) J200219	$7,790,000
Milwaukee Avenue over I-75 (S02 of 82251)	$8,160,000
Conrail Railroad over I-94 (X02 of 82024)	$15,770,000
Conrail Railroad over I-94 (X01 of 82025)	$26,850,000

B. The estimated cost of real estate is: $3,990,000

The above construction total is the amount of funding programmed for this project. The Consultant is expected to design their portion of the project within the programmed amount.

If at any time the estimated cost of construction varies by more than 5% of the current programmed amount, then the Consultant will be required to submit a letter to the MDOT Project Manager justifying the changes in the construction cost estimate.

REQUIRED MDOT GUIDELINES AND STANDARDS:

Work shall conform to current MDOT, FHWA, and AASHTO practices, guidelines, policies, and standards (i.e., Road Design Manual, Standard Plans, Published MDOT Design Advisories, Drainage Manual, Roadside Design Guide, A Policy on Geometric Design of Highways and Streets, Michigan Manual of Uniform Traffic Control Devices, etc.).

The Consultant is required to use the MDOT Current Version of Bentley Microstation/GEOPAK or PowerGEOPAK (published at Section 2.2.2 of the Design Submittal Requirements) with the current MDOT workspace (published at Section 2.2.1 of the Design Submittal Requirements). 3D Models are required for all applicable projects. See Chapter 2 of the Design Submittal Requirements for a complete listing of applicable projects. The consultant shall comply with all MDOT CADD standards and file naming conventions.

MDOT RESPONSIBILITIES:

A. Schedule and/or conduct the following:
   1. Project related meetings
   2. Base Plan Review
   3. The Plan Review
   4. Omissions/Errors/Check
   5. Utility Coordination Meetings
   6. Final AP Preconstruction item cost estimates using Consultant supplied files.

B. Furnish pertinent reference materials.

C. Provide electronic copies of the aerial survey and supplemental pickup survey completed in 2009. This will include control point information. Provide electronic copies of the additional pick up survey and structure survey currently underway once completed.

D. Furnish prints of an example of a similar project and old plans of the area, if available.

E. Obtain all permits for the project as outlined in the next section using Consultant supplied information.

F. Furnish a base utility drawing in CADD format showing the locations of known existing utilities.

G. Distribute Consultant prepared plans and applicable special provisions to utility owners within the project limits for the purpose of facilitating utility coordination and scheduling utility coordination meetings.

H. Coordinate any necessary utility relocations.

I. Furnish traffic data for I-94 and the local road over the bridges.

J. Furnish the number of lanes required over the bridge based on a traffic analysis currently being completed by the MDOT ORC.

K. Furnish a pavement design.

L. Provide information regarding ROW needs and permits through MDOT's ORC.

M. Determine the type of aesthetics to be incorporated into the design of the project.

N. Assemble the plan review submittal packages using information provided by the selected Consultants.

O. Furnish FTP site for software download and instructions for the MDOT Stand Alone Proposal Estimator's Worksheet (SAPW).

MDOT SUPPLEMENTAL DESIGN SUPPORT CONSULTANT RESPONSIBILITIES:

Complete the design of this project including, but not limited to the following:

The Consultant must adhere to all applicable OSHA and MIOSHA safety standards, including the appropriate traffic signs for the activities and conditions for this job and perform field operations in accordance with the Department's Personal Protective Equipment (PPE) policy as stated in the MDOT Guidance Document #10118.

Meet with the MDOT Project Manager to review project, location of data sources and contact persons, and review relevant MDOT operations. The Consultant shall review and clarify project issues, data needs and availability, and the sequence of events and team meetings that are essential to complete the design by the project plan completion date. Attention shall be given to critical target dates that may require a large lead time, such as geotechnical requirements, ROW submittal dates, Railroad coordination requirements, utility conflict resolution, local agency meetings, etc.

A. The Project Manager for each Consultant Team will participate in regular coordination meetings with MDOT and other design consultants at the I-94 Project Office. Key staff for each Consultant Team will participate in regular Over-The-Shoulder review meetings at the I-94 Project office.

B. Obtain soil borings of sufficient depth and number for the scope of work being proposed. Perform a geotechnical analysis as defined in Preconstruction Task 3510.

C. Design the project to minimize the amount of "throw away" work. Throw away work is defined as features constructed as part of this project that will be removed to accommodate the full build out of the I-94 Modernization Project. This should include, but is not limited to using the span configurations recommended in the Detailed Engineering Report for the project, transitioning from the proposed grades at the bridge to the existing grades along the local roads as efficiently as possible, minimizing the grade raise required along the local road.

D. Coordinate extensively with other MDOT design consultants at the I-94 Project Office to provide any information needed to complete the design tasks they are responsible for.

E. Incorporate the selected maintenance of traffic concept into the design the roadway approaches. The selected Design Support Consultant will be given the opportunity to provide comments on the maintenance of traffic concept prior to the selection of the concept. Prepare special provisions and staging plans for maintaining traffic during construction, as well as the TMP.

F. Incorporate the required street lighting into the design of the roadway approaches. This may include, but is not limited to providing lighting foundations and the appropriate conduit to accommodate the proposed lighting.

G. Incorporate the required permanent signing into the design of the roadway approaches. This may include, but is not limited to including overhead sign supports.

H. Incorporate the selected Aesthetics Design Guide conceptual details into the design of the project. This may include landscaping plans along the roadway approaches. MDOT's ORC will provide guidelines for the aesthetic treatments to the selected Consultant.

I. Incorporate Consultant geotechnical recommendations into the design of the roadway approaches. This may include, but is not limited to sign/ITS foundations and pavement structure design.

J. Prepare any unique special provisions required for the project and coordinate with other consultants. The MDOT Project Manager must be informed of the need for any unique special provisions and of the need to modify any previously approved special provisions to apply to the project. Unique special provisions, including previously approved special provisions that are modified to apply to this project, **should be submitted for review and approval a minimum of 6 weeks prior to the Plan Completion for the project.**

K. Provide solutions to any unique problems that may arise during the design of this project.

L. Public information and/or stakeholder meetings will be required for this project, and is included in the scope of services for MDOT's ORC. The Consultant may be asked to assist with the public outreach by providing information that will be used at Public Information Meetings. This may include, but is not limited to, providing CAD drawings, prints of developed plan sheets and attending meetings to answer questions related to the project.

M. Compute and verify all plan quantities.

N. The Consultant may be required to provide Design Services during the construction phase of this project. If such services are required, then a separate authorization for those services will be issued.

O. Maintain a Design Project Record on MDOT's ProjectWise system which includes a history of significant events (changes, comments, etc.) which influenced the development of the plans, dates of submittals and receipt of information.

P. Submit the excavation locations which may contain contamination. The MDOT Project Manager then can proceed in requesting a Project Area Contamination Survey (PACS).

Q. The Consultant shall prepare the CPM network for the construction of this project.

R. The Consultant representative shall record and submit type-written minutes for all project related meetings to the MDOT Project Manager using MDOT's ProjectWise system within two weeks of the meeting. MDOT will provide and distribute official meeting minutes for the Plan Review Meeting.

S. The Consultant will provide to MDOT at the scheduled submittal dates, electronic copies (in Adobe PDF format) of the required specifications and plan set materials for distribution by MDOT for all reviews for this project.

T. ***The Consultant Design Team will provide to MDOT a letter with each submittal required for this project certifying that the Project QA/QC plan has been followed and completed. The QA/QC reviews must be completed before submitting the package to MDOT.***

U. Prepare and submit electronically (native format or Adobe PDF) any information, calculations, hydraulic studies, or drawings required by MDOT for acquiring any permit (ie. NPDES, DEQ, etc), approvals (i.e. county drain commission) and related mitigation. MDOT will submit permit requests.

V. Attend any project-related meetings as directed by the MDOT Project Manager.

W. The MDOT Project Manager shall be the official MDOT contact person for the Consultant **and shall be made aware of all communications regarding this project**. The Consultant must either address or send a copy of all correspondence to the MDOT Project Manager and any other designated parties, to be discussed at the Scope Verification Meeting. This includes all Subcontractor correspondence and verbal contact records.

X. The Consultant shall contact the MDOT Project Manager whenever discoveries or design alternatives have the potential to require changes in the scope, limits, quantities, costs, or right-of-way of the project.

Y. The Consultant shall be responsible for showing on the plans the location and names of all existing utilities within the limits of the project utilizing the base utility drawing furnished by the MDOT ORC. In the course of resolving utility conflicts, the Consultant shall make modifications to the plans or design details and provide assistance as directed by the MDOT Project Manager. The Consultant shall attend any utility meetings called to ensure that the concerns are addressed on the plans involving utilities. The Consultant shall assist in the review of utility permit requests to ensure compatibility with the project as directed by the MDOT ORC and/or Project Manager.

Z. On the first of each month, the Consultant Project Manager shall submit a monthly project progress report to the Project Manager via ProjectWise.

AA. Commit technical project staff to the MDOT lead Technical Training Program which will focus on the following.

1. MDOT Planisware Task Network and CPM Scheduling
2. Document control and project team communications protocol
3. Design criteria (i.e. applicable Federal/State standards, design exceptions)
4. Software (ProjectWise, PowerGEOPAK, GEOPAK)
5. Plan Development & Packaging (CAD Standards, e-Proposal)
6. MDOT Specifications and Special provisions (FUSP, FUSS, Unique)
7. Quantity take-offs (Pay Items) and Cost Estimating (SAPW)
8. Quality Control/Quality Assurance and Constructability reviews
9. Design assistance during construction (RFI, Shop drawing review)

BB. The Consultant shall be responsible for Packaging the Milestone Plan Submittals including specs & estimates for all construction packages and shall closely coordinate this work with MDOT, the MDOT ORC and other MDOT design consultants. The construction packages are anticipated to include at least two (2) Advanced Bridges structure packages; one railroad bridge and one vehicular bridge package. Additionally, up to 10 unbundled small business construction packages are anticipated for non-critical work items including but not limited to landscaping, turf establishment, fencing/guardrail and sidewalk paving.

CC. Design and develop traffic signal plans and proposal materials, engineering documents, and related work necessary for new installation or modernization of electronic traffic signal control devices. Review MDOT or MDOT design consultant provided soil borings to assist in design of traffic signal foundations which may include strain pole foundation design as required. MDOT has developed a strain pole foundation design table for box span signals. This table can be found on the Traffic and Safety website in the signals correspondence and guidelines area. A special foundation design may be necessary depending on site specific soil properties and propose signal layout and geometry. Refer to suggested Traffic Signal Design Procedure on the MDOT website for details. Any existing or proposed pedestrian pushbuttons and ramps must be accessible per ADA guidelines and MDOT design practices.

The plans shall be submitted to MDOT as follows:

A. Base Plans (Pre-GI Review Meeting) showing the geometric layout which fits within available project right-of-way. This shall be accompanied by a detailed estimate of costs.

B. Preliminary Plans (Plan Review Meeting) that are approximately 70% complete shall be accompanied by an estimate of cost based on the quantities of major pay items shown on the plans.

C. Pre-project coordination plans (Pre-OEC plans) consisting of final plans that are approximately 90% complete and any special provisions and supplemental specifications that may be required.

D. Final plans (OEC plans), Contract Quantities, updated cost estimate, and any special provisions and supplemental specification that may be required. Plan Review comments should be reflected in all sheets.

E. Regular Over-The-Shoulder (OTS) Reviews consisting of at least monthly “in progress” plan submittals showing design progress for use in coordinating and packaging with other consultants. Note “in progress” plan submittals <u>are not</u> considered formal submittals subject to QA/QC certification.

The Consultant will proceed with Preliminary Plans upon receiving MDOT and FHWA approval of the Base Plans. Additionally, the Consultant will proceed with Final Plans once FHWA has approved the Preliminary Plans.

All work shall conform to AASHTO specifications, MDOT specifications, and MDOT design and detailing practices. All submittals (excluding in progress submittals) to MDOT shall require quality assurance review and meet the attached quality assurance document. The Consultant shall maintain office records, submit monthly progress reports to the MDOT Project Manager, and submit MDOT vouchers with their billings. The Consultant is advised that MDOT considers plans 30% complete upon approval of the base plans, 70% complete when the preliminary plans are distributed, and 100% complete when final plans are submitted for review.

All submittals to MDOT shall be dated and identified by structure number, control section, job number including phase, MDOT contract number, route and location. An electronic copy of each submittal will uploaded to MDOT's ProjectWise system.

A file containing project related correspondence, design, and any information resulting from research shall be submitted to MDOT with final deliverables.

DELIVERABLES:

The Consultant shall enter in MDOT ProjectWise, in the appropriate folders all electronic files associated with the project in their native format (spreadsheets, CADD files, GEOPAK files, Roadway Templates etc.) as directed by the MDOT Project Manager or as part of each milestone submittal at a minimum. All CADD/GEOPAK files shall be created and identified with standard MDOT file names in conformance with MDOT's I-94 Document Control Plan. It is the Consultant's responsibility to obtain up to date MicroStation and GEOPAK seed/configuration files necessary to comply with MDOT's CADD standards which are published monthly to the MDOT website. Any CADD/GEOPAK files that do not conform to MDOT standards will be returned to the Consultant for correction at the Consultant's expense.

Proposal documents shall be submitted, to MDOT ProjectWise, in the appropriate folders, in their native format with standard naming conventions as well as combined into one PDF file in the sequence specified by MDOT. To provide text search capabilities the combined proposal shall be created by converting native electronic files to PDF. Scanning to PDF is discouraged except in instances where it is necessary to capture a legally signed document or a hard copy version of a document is all that exists.

Plan sheets shall be submitted to MDOT ProjectWise in the appropriate folders in a set in PDF 11" x 17" format. For final Plan Turn-In, a title sheet shall be printed, signed, sealed, and then scanned for inclusion with the PDF set. The original title sheet shall be sent to the MDOT Project Manager.

Reference Information Documents (RID) shall be entered into MDOT ProjectWise in the appropriate folder with standard naming conventions and content at milestone submittals as defined by Chapter 4 of the Design Submittal Requirements. The RID files included will depend on the design survey deliverables and project template (See Chapter 2 of the Design Submittal Requirements). These files could include but are not limited to: CADD, existing terrain, proposed cross sections, 3D models and files generated for Automated Machine Guidance (AMG) and automated inspection/stakeout activities.

Stand Alone Proposal Estimator's Worksheet (SAPW) or the Project Quantity Spreadsheet (PQS) shall be used to generate the xml files necessary for import into the AP Preconstruction bid letting software. The .xml files shall be entered into MDOT ProjectWise in the appropriate folder. The project removal, construction, and profile sheets will require a scale of **1"=80' or as approved by the MDOT Project Manager.**

All plans, special provisions, estimates, and other project related items shall meet all MDOT requirements and detailing practices (i.e., format, materials, symbols, patterns, and layout) or as otherwise directed by the Project Manager. All plans, specifications, and other project related items are subject to review and approval by MDOT and/or MDOT's ORC.

MDOT PERMITS:
The Consultant shall be responsible for obtaining up to date access permits and pertinent information for tasks in MDOT Right of Way (ROW). This information can be obtained through the MDOT Utilities/Permits Section, Real Estate Division at (517) 241-2103.

PROJECT SCHEDULE:
The scheduled Plan Completion dates for these projects are **June 2019 (MDOT In-House Bridges), May 2020 (Vehicular Bridges) and November 2020 (Railroad Bridges)**. The Consultant shall use the following events to prepare the proposed implementation schedule as required in the Guidelines for the Preparation of Responses on Assigned Design Services Contracts. These dates shall be used in preparing the Consultant's Monthly Progress Reports.

BACKGROUND INFORMATION:
Plans for the existing bridges and an Accelerated Bridge Construction (ABC) Concepts Report can downloaded from the MDOT FTP site (ftpmdot.state.mi.us). The information can be found under the file name "I-94 Modernization Project" at the following link: Warren-I-94 Small Business & Supplemental Design. This includes the I-94 Detailed Engineering Report and its appendices are also available on DVD upon request.

MDOT has contracted with a team led by HNTB to serve as the Owner's Representative Consultant (ORC) for the I-94 Modernization Project. HNTB's scope of work includes assisting MDOT with the review of the plans, special provisions and cost estimates for the bridges included in this Request for Proposal to ensure consistency with the goals for the larger project and with the design and detailing across the bridges included in this Request for Proposal. Comments from MDOT's ORC approved by the MDOT Project Manager shall be considered the same as comments directly from MDOT, and must be addressed by the selected Design Support Consultant.

MDOT OWNER'S REPRESENTATIVE CONSULTANT RESPONSIBILITIES:

A. Utility Coordination and Investigation (and drawings)

B. Public Involvement

C. Accelerated Bridge Construction Concepts and Strategies

D. Right-of-Way Services

E. Traffic Capacity Analysis and Geometric Studies

F. Safety Studies

G. Aesthetics Design Guide (and conceptual details)

H. Design Surveys

I. Small Business training program (includes technical and executive training)

J. Project office mobilization

K. Project office team communications plan

MDOT BRIDGE DESIGN CONSULTANT RESPONSIBILITES:

A. Bridge Design

B. Bridge Load Rating Analysis

C. Geotechnical Engineering to support the foundation design for structures.

D. Other necessary design services not addressed in the Design Support Contracts

E. Prepare and package for each bridge the roadway approach plans, details and specifications prepared by the Consultant for design and construction. This project will be required to follow the Design Deliverable Enhancement Package (DDEP).

F. Establish the roadway profile for the bridge roadway over I-94 and provide assistance to the Small Business Design Support Consultants responsible for the road approach and site demolition plans.

MDOT SMALL BUSINESS DESIGN SUPPORT CONSULTANT RESPONSIBILITIES:

Complete the design of certain elements of the project to be determined prior to the Scope Verification Meeting with MDOT personnel. The design services to be performed by the MDOT Small Business Design Support Consultants will be determined on a per bridge basis including, but not limited to the following:

A. Road and Streets (Road approach and site demolition plans)

B. Maintaining Traffic Plans and Provisions

C. Street/Freeway Lighting

D. Permanent Freeway Traffic Signing Plans

E. Permanent Non-Freeway Traffic Signing Plans

F. Pavement Markings Plans

G. Traffic Signal Design

H. Freeway Lighting

I. Municipal Utility Design

J. Landscaping

K. Roadway Geotechnical Investigations

K. ITS Design

CONSULTANT PAYMENT – Actual Cost Plus Fixed Fee

Compensation for this project shall be on an **actual cost plus fixed fee** basis. This basis of payment typically includes an estimate of labor hours by classification or employee, hourly labor rates, applied overhead, other direct costs, subconsultant costs, and applied fixed fee. The fixed fee for profit allowed for this project is 11.0% of the cost of direct labor and overhead.

All billings for services must be directed to the Department and follow the current guidelines. The latest copy of the "Professional Engineering Service Reimbursement Guidelines for Bureau of Highways" is available on MDOT's website. This document contains instructions and forms that must be followed and used for billing. Payment may be delayed or decreased if the instructions are not followed.

Payment to the Consultant for services rendered shall not exceed the maximum amount unless an increase is approved in accordance with the contract with the Consultant. Typically, billings must be submitted within 60 days after the completion of services for the current billing. The final billing must be received within 60 days of the completion of services. Refer to your contract for your specific contract terms.

Direct expenses, if applicable, will not be paid in excess of that allowed by the Department for its own employees in accordance with the State of Michigan's Standardized Travel Regulations. Supporting documentation must be submitted with the billing for all eligible expenses on the project in accordance with the Reimbursement Guidelines. The only hours that will be considered allowable charges for this contract are those that are directly attributable to the activities of this project.

MDOT will reimburse the consultant for vehicle expenses and the costs of travel to and from project sites in accordance with MDOT's Travel and Vehicle Expense Reimbursement Guidelines, dated May 1, 2013. The guidelines can be found at http://www.michigan.gov/documents/mdot/Final_Travel_Guidelines_05-01-13_420289_7.pdf?20130509082418. MDOT's travel and vehicle expense reimbursement policies are intended primarily for construction engineering work. Reimbursement for travel to and from project sites and for vehicle expenses for all other types of work will be approved on a case by case basis.

MDOT will pay overtime in accordance with MDOT's Overtime Reimbursement Guidelines, dated May 1, 2013. The guidelines can be found at http://www.michigan.gov/documents/mdot/Final_Overtime_Guidelines_05-01-13_420286_7.pdf?20130509081848. MDOT's overtime reimbursement policies are intended primarily for construction engineering work. Overtime reimbursement for all other types of work will be approved on a case by case basis.

ATTACHMENT A

SCOPE OF SERVICE

FOR

UTILITY COORDINATION

The Consultant is directly responsible for all aspects of the project's utility coordination. The Consultant is expected to provide technical assistance to MDOT, utilities and other stakeholders regarding utility identification, project utility coordination and utility conflict resolution.

A utility is defined as any privately, publicly, municipal or cooperatively owned line, facility, or system for producing, transmitting, or distributing communication, cable television, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, or any other similar commodity, including any fire or police signal system or street lighting system.

MDOT shall -

- Provide a preliminary list of utilities, with contact information, that may have facilities located within the project limits. This list may not be 100% accurate and/or complete.
- Provide assistance, if necessary, in contacting utilities to obtain facility records.
- Provide Consultant with utility responses and facility records if utility information solicitation has been performed.
- Organize and host a kick-off meeting with Consultant and MDOT prior to Consultant beginning utility coordination services.

Consultant shall -

- Maintain a Utility Conflict Matrix* spreadsheet and deliver as the bi-weekly status report.
- Distribute form letters, plans, etc. as outlined in 14.16 (Request for Utility Information) and 14.26 (Distribution of Preliminary Plans to Utilities and Utility Coordination Meeting) of the MDOT Road Design Manual.
    - Identify existing/proposed utility owners and facilities.
    - Collect and compile utility responses.
    - Follow up with non-responsive utilities.
- Schedule and conduct utility meetings for the resolution of conflicts between utility facilities and proposed construction.
    - Identify conflicts, discuss possible design modifications, develop utility relocation schemes, discuss reimbursable relocations, and discuss project scope and schedule.
    - Identify the utility's design and construction contacts and ensure the plan's note sheet utility contact information is accurate.
    - Record meeting minutes and distribute to all attendees.

- Schedule and conduct field meetings with individual utilities to resolve conflicts.
- Schedule and conduct meetings convened for the purpose of utility betterments.
- Ensure municipal utility relocations, betterments and reimbursements follow Chapter 9 of the MDOT Road Design Manual.
- Identify eligible reimbursable utility relocations, for public/private utilities, as outlined in 23 Code of Federal Regulations (CFR) Part 645 Subparts A and B – Utilities and ensure 23 CFR Part 635.410 - Buy America Requirements are met.
    - Collect documentation to evaluate reimbursable utility relocations.
- Evaluate utility relocation plans for compatibility with the proposed project.
- Ensure utility relocation schedules do not impact the project schedule.
- Confirm utility relocation permit applications are submitted to the TSC.
- Prepare the "Utilities Status Report" (MDOT Form 2286) and "Notice to Bidders - Utility Coordination" documents.
- Track and monitor utility relocation progress.

Deliverables (Provided to the TSC Utility Coordinator and Project Manager):

- Courtesy copies of all correspondence with the utilities
- Utility Conflict Matrix
- Utility coordination meeting minutes
- Reimbursable utility relocation documentation
- Utilities Status Report and Notice to Bidders - Utility Coordination

* The Utility Conflict Matrix (UCM) is located on the http://www.trb.org/Main/Blurbs/166731.aspx website under Training materials > Prototype 1 – Stand-alone UCM. The UCM was developed as part of the Transportation Research Board's (TRB) second Strategic Highway Research Program (SHRP 2) Report S2-R15B-RW-1: Identification of Utility Conflicts and Solutions which provides concepts and procedures to identify and resolve utility conflicts. Tools described in the report include utility conflict matrices that enable users to organize, track, and manage conflicts that frequently arise.